



COUNTY OF SAN DIEGO

OFFSTREET PARKING DESIGN MANUAL

JUNE 1985

Department of Planning & Land Use

ADA ACCESSIBLE & VAN ACCESSIBLE PARKING STANDARDS

1994 UNIFORM BUILDING CODE

1128B-1129B.3

sonably and safely be used by persons with physical disabilities, there shall be provided conforming curb ramps and a usable pathway.

EXCEPTIONS: 1. When the grade differential of the walking surface of a pedestrian grade separation exceeds 14 feet (4267 mm) due to required height clearance and grade conditions, and the enforcing agency finds that because of right-of-way restrictions, topography or natural barriers, wheelchair accessibility or equivalent facilitation would create an unreasonable hardship, such accessibility need not be provided. However, the requirements in these regulations relating to other types of mobility shall be complied with.

2. For existing facilities, this section shall not apply where, due to legal or physical constraints, the site of the project will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship.

NOTE: See Section 101.17.11, Item 1.4.

SECTION 1129B — ACCESSIBLE PARKING REQUIRED

1129B.1 General. Each lot or parking structure where parking is provided for the public as clients, guests or employees, shall provide accessible parking as required by this section. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances. Table 11B-7 establishes the number of accessible parking spaces required.

EXCEPTION: This subsection shall not apply to existing facilities where compliance with local ordinances precludes satisfying the above requirements or of providing equivalent facilitation unless a change of occupancy occurs.

TABLE 11B-7—SPACES REQUIRED
Establishes the number of accessible parking spaces required.

| TOTAL NUMBER OF PARKING SPACES IN LOT OR GARAGE | MINIMUM REQUIRED NUMBER OF SPACES |
|--|-----------------------------------|
| 1-25 | 1 |
| 26-50 | 2 |
| 51-75 | 3 |
| 76-100 | 4 |
| 101-150 | 5 |
| 151-200 | 6 |
| 201-300 | 7 |
| 301-400 | 8 |
| 401-500 | 9 |
| 501-1,000 | * |
| 1,001 and over | ** |

*Two percent of total.

**Twenty plus one for each 100, or fraction thereof over 1,001.

1129B.2 Less Than Five Spaces. When less than five parking spaces are provided at buildings and facilities subject to these regulations, one shall be 14 feet (4267 mm) wide and lined to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading area. However, there is no requirement that the space be reserved exclusively or identified for use by persons with disabilities only.

1129B.3 Medical Care Outpatient Facilities. At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with this section shall be provided in accordance with Table 11B-7 except as follows:

1. **Outpatient units and facilities.** Ten percent of the total number of parking spaces provided serve each such outpatient unit or facility.

NOVEMBER 22, 1995

1-207.54

(THESE ACCESSIBLE PARKING STANDARDS SUPERCEED THE
HANDICAPPED PARKING STANDARDS IN THE OFFSTREET PARKING
DESIGN MANUAL (ie. on pages 5 through 9).)

2. *Units and facilities that specialize in treatment or services for persons with mobility impairments.* Twenty percent of the total number of parking spaces provided serve each such unit or facility.

1129B.4 Parking Space Size. Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:

1. **Dimensions.** Where single spaces are provided, they shall be 14 feet (4267 mm) wide and outlined to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area lined to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. The minimum length of each parking space shall be 18 feet (5486 mm). See Figure 11B-18A.

2. **Van space(s).** One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches (2438 mm) wide minimum and shall be designated van accessible as required by Section 1129B.5. All such spaces may be grouped on one level of a parking structure.

3. **Arrangement of parking space.** In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. Also, the space shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. Pedestrian ways which are accessible to persons with disabilities shall be provided from each such parking space to related facilities, including curb cuts or ramps as needed. Ramps shall not encroach into any parking space.

EXCEPTIONS: 1. Ramps located at the front of accessible parking spaces may encroach into the length of such spaces when such encroachment does not limit the capability of a person with a disability to leave or enter a vehicle, thus providing equivalent facilitation. See Figures 11B-18A through 11B-18C.

2. Where the enforcing agency determines that compliance with any regulation of this section would create an unreasonable hardship, a variance or waiver may be granted when equivalent facilitation is provided.

3. Parking spaces may be provided which would require a person with a disability to wheel or walk behind other than accessible parking spaces when the enforcing agency determines that compliance with these regulations or providing equivalent facilitation would create an unreasonable hardship.

NOTE: See Section 101.17.11, Item 1.4.

4. **Slope of parking space.** Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed $\frac{1}{4}$ inch per foot (2.083% gradient) in any direction.

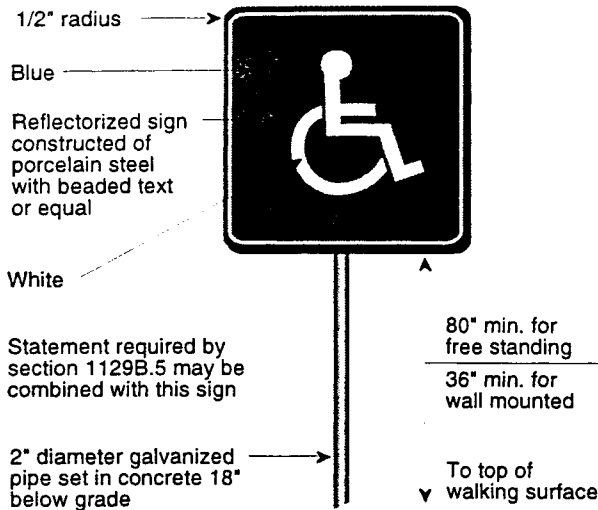
1129B.5 Identification of Parking Spaces for Off-Street Parking Facilities. Each parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of a profile view of a wheelchair with occupant in white on dark blue background. The sign shall not be smaller than 70 square inches (4516 mm²) in area and, when in a path of travel, shall be posted at a minimum height of 80 inches (2032 mm) from the bottom of the sign to the parking space finished grade. Signs may also be centered on the wall at the interior end of the parking space at a minimum height of 36 inches (914 mm) from the parking space finished grade, ground or sidewalk. Spaces complying with Section 1129B.4, Item 2 shall have an additional sign stating "Van-Accessible" mounted below the symbol of accessibility.

An additional sign shall also be posted in a conspicuous place at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space. The sign shall not be less than 17 inches by 22 inches (432 mm by 559 mm) in size with lettering not less than 1 inch (25 mm) in height, which clearly and conspicuously states the following:

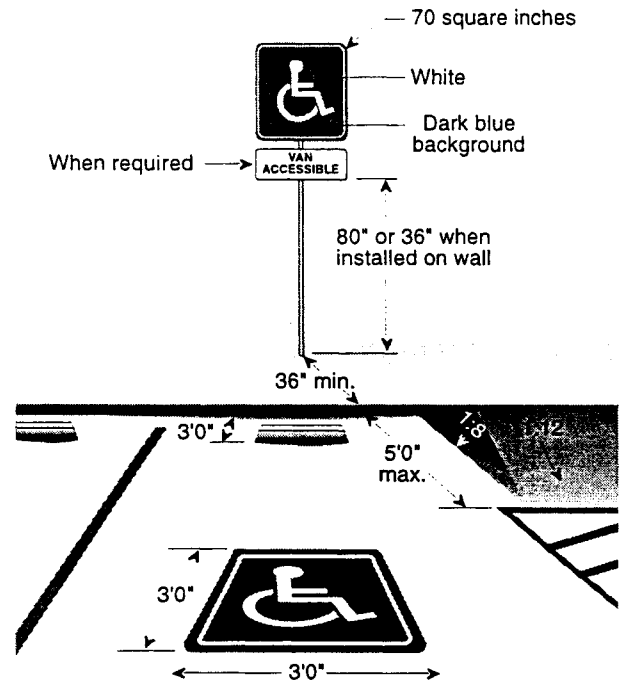
"Unauthorized vehicles parked in designated accessible spaces not displaying distinguishing placards or license plates issued for persons with disabilities may be towed away at owner's expense. Towed vehicles may be reclaimed at _____ or by telephoning _____."



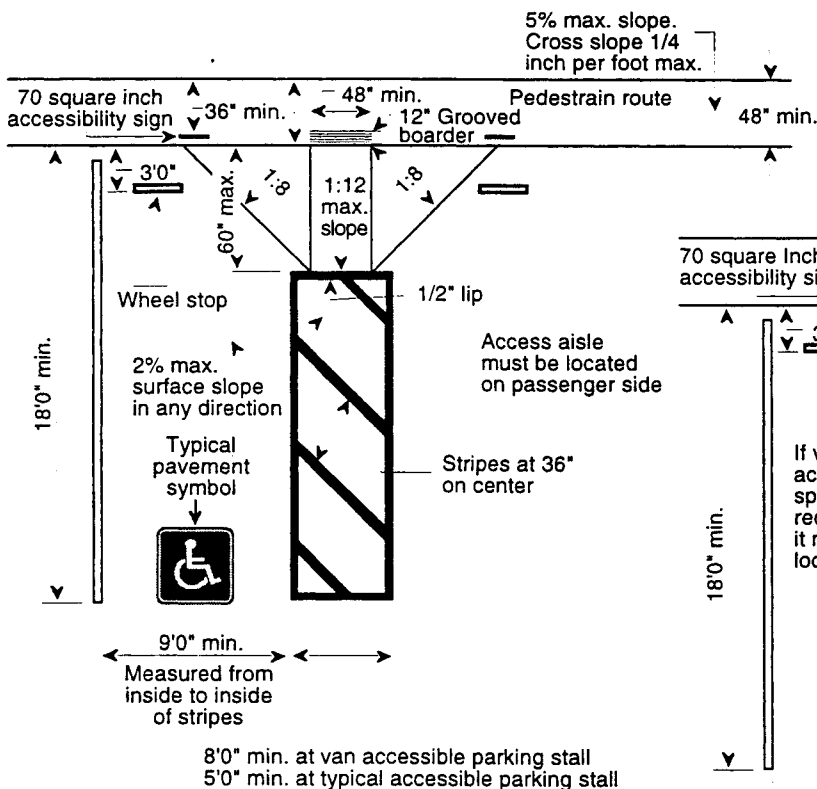
San Diego Area Chapter International Conference of Building Officials Parking, Passenger Drop-Off & Loading Zones



Note: Area of sign to be a minimum of 70 square inches. Designate for "Van Accessible" where appropriate.

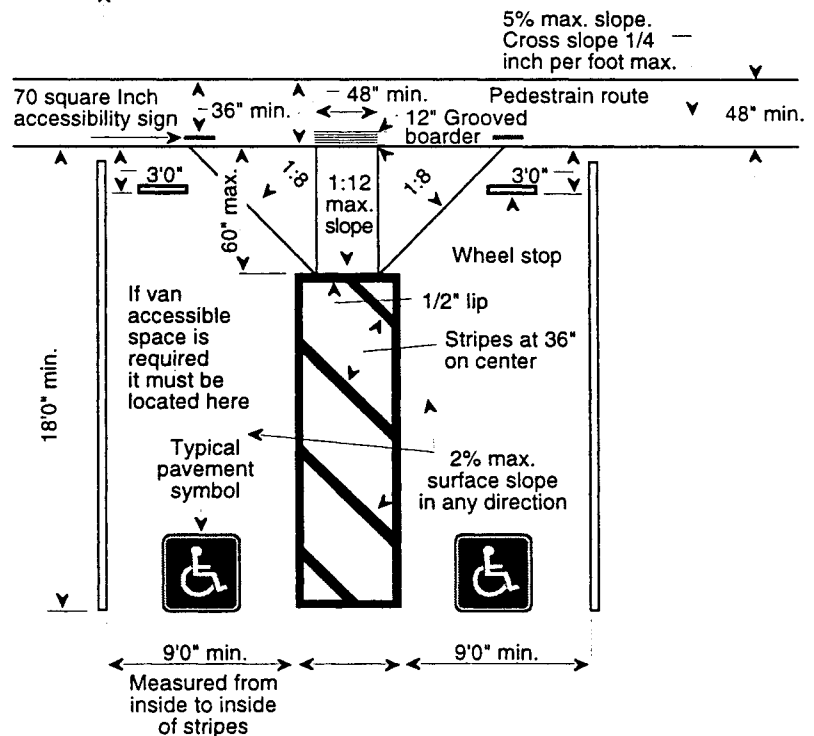


International Symbol of Accessibility



Note: When only one accessible space is provided it must be van accessible.

Single Parking Stall



Double Parking Stall

OFF-STREET PARKING DESIGN MANUAL

Contents

i

| | Page |
|---|------|
| INTRODUCTION | 1 |
| SECTION I. PARKING AREA REQUIREMENTS | |
| A. Covered Parking | 3 |
| B. Open Parking | 3 |
| C. Bicycle Storage Facilities | 3 |
| D. Exceptions | 3 |
| E. Relationship of Parking to Building Served | 3 |
| F. Location of Parking on Typical Lots | 4 |
| G. Parking from Alley | 4 |
| H. Typical Parking Lot Dimensions – Five or more spaces | 5 |
| I. Handicapped Parking Requirements | 6 |
| J. Typical Parking Lot Layout | 8 |
| K. Typical Driveway – Parking Plot Plan & Detail | 9 |
| L. Miscellaneous Requirements for Parking Areas | 11 |
| M. Paving Thickness Schedule and Details | 12 |
| SECTION II. DRIVEWAYS | |
| A. Design Standards for Residential Driveways | 15 |
| B. Typical Driveway Profiles | 16 |
| C. Concrete Driveways | 17 |
| D. Driveway Location – Corner Lot | 18 |
| E. Driveway Location and Width Requirements | 19 |
| SECTION III. LANDSCAPING | |
| A. General Requirements | 21 |
| B. Materials for Landscaping | 21 |
| C. Planting Requirements | 22 |
| D. Irrigation Requirements | 23 |
| E. Typical Perimeter Planting Plan | 23 |
| F. Typical Irrigation Plan for Perimeter Planting | 23 |
| G. Typical Parking Lot Planters | 24 |
| H. Typical Parking Lot Irrigation Plan | 24 |
| I. Landscape Design Notes | 25 |

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Department of Planning & Land Use

OFF STREET PARKING DESIGN MANUAL

* Prepared pursuant to Section 6793C of the San Diego County
Zoning Ordinance by the Department of Planning and Land Use.

* Reviewed by the Planning Commission on May 17, 1985.

* Approved by the Board of Supervisors on June 19, 1985.

This Offstreet Parking Design Manual implements Section 6793(c) of the County Zoning Ordinance:

- “c. **Design Manual.** The design, dimensions, construction, landscaping, and surfacing of parking and bicycle spaces, driveways and other areas shall conform to the requirements of the the Offstreet Parking Design Manual. The Director may administratively waive or modify one or more such requirements when practical difficulties make their strict application infeasible, and upon a finding that the waiver or modification is consistent with the purpose and intent of the Offstreet Parking Design Manual and this section. The Director shall submit any amendments to the design manual to the Planning Commission for its review and comment prior to transmitting them to the Board of Supervisors.”

The purpose of the County's parking regulations is to provide parking areas which are functional in design and adequately landscaped and screened to minimize their visual, noise and headlight impact, particularly when adjoining residential areas. Specific parking regulations are contained in Section 6750 et. seq. of the **County Zoning Ordinance**. Also, landscaping and fencing requirements are found in Section 6700 of the Zoning Ordinance. In designing a parking area, the following is especially important:

- i. **SIZE OF PARKING SPACES.**
Regular = 8'-6" x 18'. (See footnote †, page 5.)
Handicapped = 14' x 19'. (See page 7 for Double Space Size.)
- ii. **BICYCLE PARKING SPACES.**
Most uses, particularly office and retail, also require bicycle spaces, typically at a ratio of 1.5 bicycle spaces for each 10 parking spaces. Where bicycle spaces are required there shall not be less than three spaces provided.
- iii. **LOCATION OF PARKING SPACES.**
Some zones require parking to observe certain setbacks. See Section 6787 of the Zoning Ordinance and page 4 of this manual for details.
- iv. **LANDSCAPING.**
The M50 and M52 Industrial Zones require landscape strips along street frontages and adjacent to residential zones. (See Section 6714 a.) Certain other zones (see Section 6793 b) also require that 5% of a parking area be landscaped (typically, 14 square feet per parking space).
- v. **FENCING.**
Parking areas abutting residentially-zoned property are required to be screened by a solid fence or wall. (See Section 6706.)

2 *Blank*

Section I. Parking Area Requirements 3

SAN DIEGO COUNTY ZONING ORDINANCE SECTION 6750 ET. SEQ.

- A. **COVERED PARKING.** Covered or enclosed parking spaces may be located anywhere on a building site where a structure may be located. (See Zoning Ordinance Section 4835.)
- B. **OPEN PARKING.** Open parking spaces shall be located outside the ultimate right-of-way of any street and as follows:

| ZONE USE REGULATION | DETAIL See Page 4 | YARDS | | | |
|------------------------------|-------------------------|-------|--------------------------|----------------------------------|------|
| | | FRONT | SIDE (Interior) | SIDE (Exterior) Corner Lot | REAR |
| All Residential | #1 | | <input type="checkbox"/> | | • |
| All Agricultural | #1 | | <input type="checkbox"/> | | • |
| S-80, S-87, S-88, S-90, S-92 | #1 | | <input type="checkbox"/> | | • |
| C-30, C-31, C-46 | #2 | | • | • | • |
| Other Commercial | #3 | •* | • | • | • |
| All Industrial | #3 | •* | • | • | • |
| S-82, S-86, S-94 | #3 | •* | • | • | • |

- = Parking Permitted
- ☐ = Parking Permitted – When separated from adjacent property by a 6' high solid fence or wall
- * = Parking Not Permitted – In any required planting strip

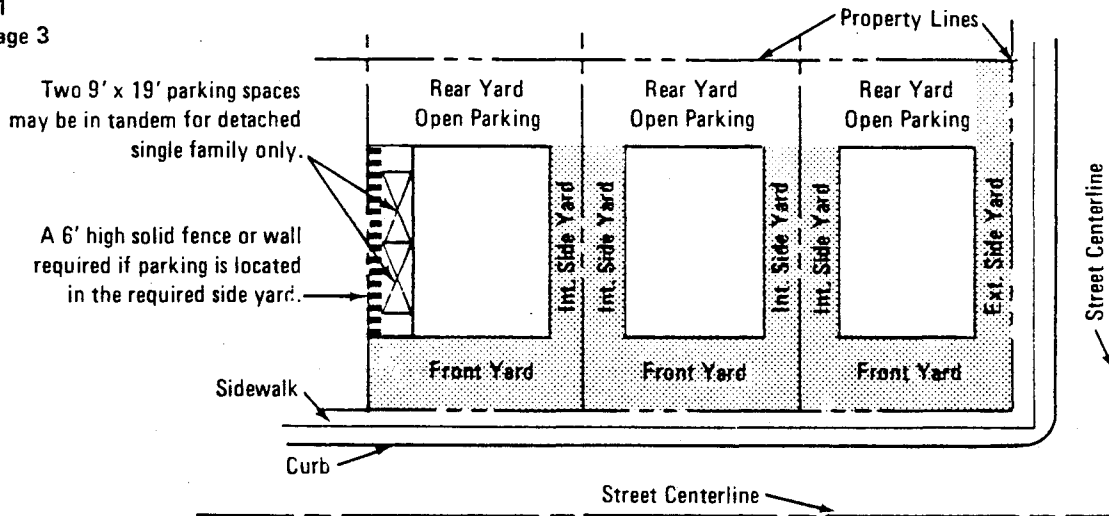
- C. **BICYCLE SPACES.** Bicycle spaces shall be located:
- As close and accessible to the use or building served as is the most convenient motor vehicle parking (other than handicapped parking).
 - As close to building entrances as is practical while maintaining a minimum access aisle of 5 feet and without interfering with pedestrian traffic.
 - At ground level.
- D. **EXCEPTIONS.** A use permit, variance, administrative permit, or site plan may specify the location of parking areas and bicycle spaces in locations other than as permitted by all of the above.
- E. **RELATIONSHIP OF PARKING AREA TO BUILDING SERVED.** All required parking and bicycle spaces shall be located on the same lot or building site with the use or structure they serve, unless all of the following conditions are met:
- There is a traversable pedestrian route, not more than 600 feet in length over and along public streets or walkways or permanently established easements between the parking or bicycle spaces and the uses or structures served; and
 - The site is subject to the S-86 Parking Use Regulations; or all persons owning an interest in the site have executed and recorded a written instrument in a form approved by the Director, whereby they agree to the application of the S-86 Parking Use Regulations to the site.

NOTE: See Zoning Ordinance Section 6788 for Collective Parking Regulations.

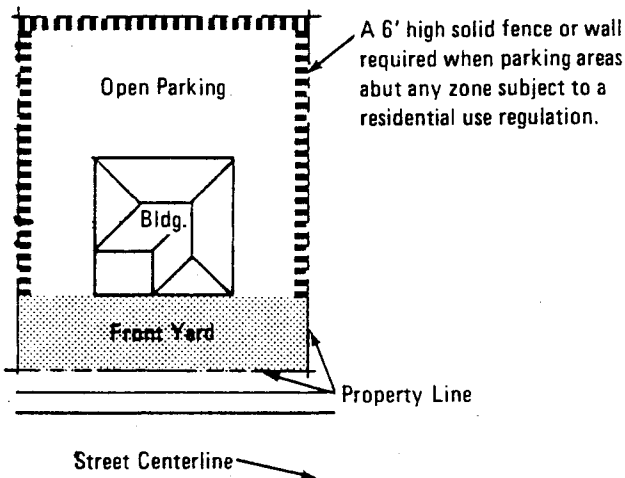
4 F. LOCATION OF PARKING ON TYPICAL LOTS.

NOTE: No parking in shaded areas.

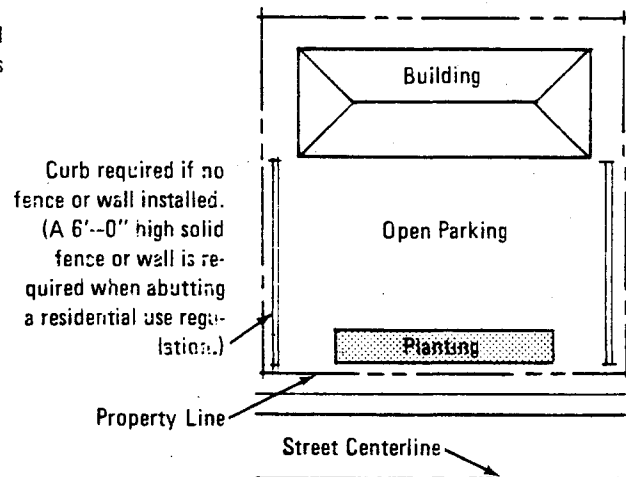
DETAIL 1
See "B" page 3



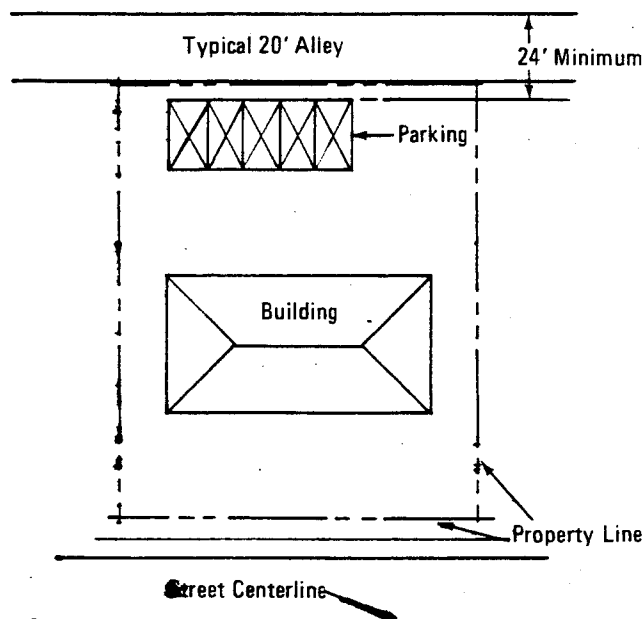
DETAIL 2
See "B" page 3



DETAIL 3
See "B" page 3

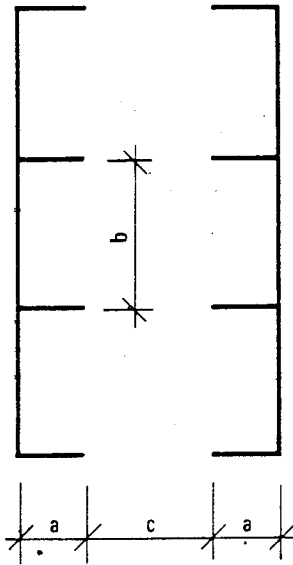


G. PARKING FROM ALLEY.

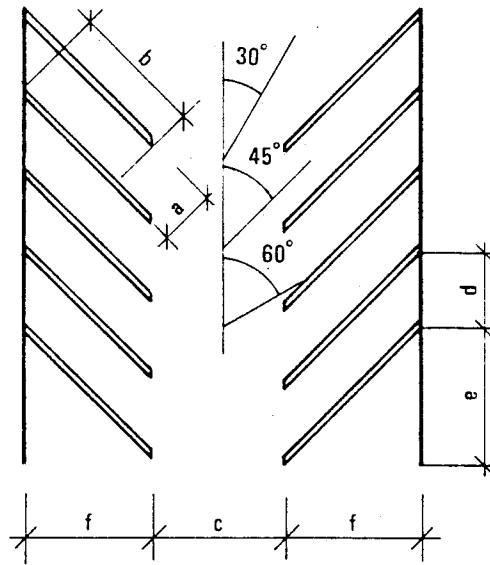


H. TYPICAL PARKING LOT DIMENSIONS

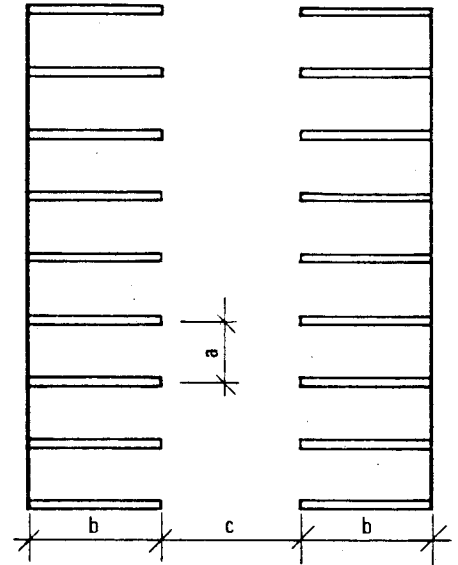
0° PARKING



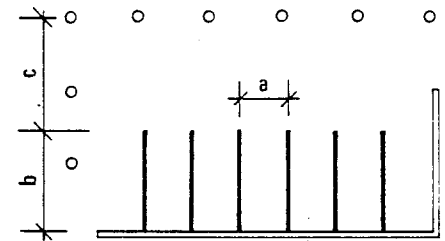
30°, 45°, 60° PARKING



90° PARKING



| MINIMUM DIMENSIONS FOR REQUIRED PARKING SPACES | | | | | |
|---|---------|----------|----------|----------|---------|
| Dimension Indicator | 0° | 30° | 45° | 60° | 90° |
| a | 9'-0" | 8'-6" † | 8'-6" † | 8'-6" † | 8'-6" † |
| b | 21'-0" | 18'-0" | 18'-0" | 18'-0" | 18'-0" |
| c | 15'-0"* | 13'-0" * | 14'-0" * | 18'-0" * | 22'-0" |
| d | | 17'-0" | 12'-0" | 9'-10" | |
| e | | 28'-4" | 18'-8" | 11'-5" | |
| f | | 16'-4" | 18'-8" | 19'-10" | |
| SMALL CAR PARKING SPACE† | | | | | |
| a | 10'-0" | 8'-6" | 8'-6" | 8'-6" | 8'-6" |
| b | 19'-0" | 15'-0" | 15'-0" | 15'-0" | 15'-0" |
| c | 15'-0" | 13'-0" * | 14'-0" | 18'-0" | 21'-0" |
| d | | 17'-0" | 12'-0" | 9'-10" | |
| e | | 25'-9" | 16'-7" | 9'-11" | |
| f | | 14'-10" | 16'-7" | 17'-3" | |
| HANDICAPPED PARKING SPACES§ | | | | | |
| a | 14'-0" | 14'-0" | 14'-0" | 14'-0" | 14'-0" |
| b | 23'-0" | 19'-0" | 19'-0" | 19'-0" | 19'-0" |
| c | 15'-0" | 13'-0" | 14'-0" | 18'-0" | 24'-0" |
| d | | 28'-0" | 19'-10" | 16'-2" | |
| e | | 34'-5" | 22'-0" | 13'-0" | |
| f | | 19'-11" | 22'-0" | 23'-0" | |

MOTORCYCLE & BICYCLE
PARKING SPACES

| MOTORCYCLE & BICYCLE PARKING SPACES | | | |
|--|------------|---------|--------|
| Dimension Indicator | Motorcycle | Bicycle | |
| | | Open | Closed |
| a | 3'-6" | 2'-0" | 3'-3" |
| b | 7'-0" | 6'-0" | 6'-0" |
| c | 8'-0" | 5'-0" | 5'-0" |

Spaces shall be protected by fence, wall, or curb at least 6" high or by a 4" Ø steel pipe @ 5 ft. o.c., 3 ft. above ground.

NOTES:

- * Minimum of 20 feet for two-way traffic.
- † Double striped spaces may be reduced to 8'-6" wide. Single striped spaces shall be a minimum 9'-0" wide.
- ‡ Small car spaces shall not be permitted as part of the required parking.
- § See pages 6 and 7 for required number of spaces and other handicapped parking requirements.

6I. HANDICAPPED PARKING REGULATIONS

1. SIZE OF SPACE. Minimum width of space shall be 9 feet adjacent to a 5 foot wide marked loading area. An adjacent space may share a loading area. (See diagram, page 7.)
2. NUMBER OF REQUIRED SPACES.

| TOTAL # SPACES | # HANDICAPPED SPACES ¹ | TOTAL # SPACES | # HANDICAPPED SPACES ¹ |
|-------------------|-----------------------------------|----------------|-----------------------------------|
| 1-40 ² | 1 | 161-300 | 5 |
| 41-80 | 2 | 301-400 | 6 |
| 81-120 | 3 | 401-500 | 7 |
| 121-160 | 4 | over 500 | +1 for each 200 over 500 |

3. SPACES SHALL BE LOCATED:
 - a. As near as practical to a primary accessible entrance to the associated facility over a 4 foot wide walk suitable for use by a physically handicapped person.
 - b. Where the slope of finish grade does not exceed $\frac{1}{4}$ inch per foot; and
 - c. Where the handicapped are not required to pass behind a parked vehicle other than their own.³
4. SIGNING. Each handicapped parking space shall be identified by the "International Symbol of Accessibility" (white symbol on a blue background) displayed on:
 - a. A sign (min. 70 sq. in.) located at the interior end of the space mounted either a minimum of 80 inches above finish grade on a free standing post or on a wall a minimum of 36 inches above finish grade or sidewalk; and
 - b. The surface of the parking space on a 3 foot painted square.

In addition a sign of not less than 17 by 22 inches shall be located near the entrance to the parking area which displays the symbol and the following text:

"Unauthorized vehicles not displaying distinguishing placards or license plates issued for physically handicapped persons may be towed away at owner's expense. Towed vehicles may be reclaimed at (name and address) or by telephoning (number)."

All signs shall be made of reflectorized porcelain enamel on steel with beaded text or equal.

5. MISCELLANEOUS REQUIREMENTS.

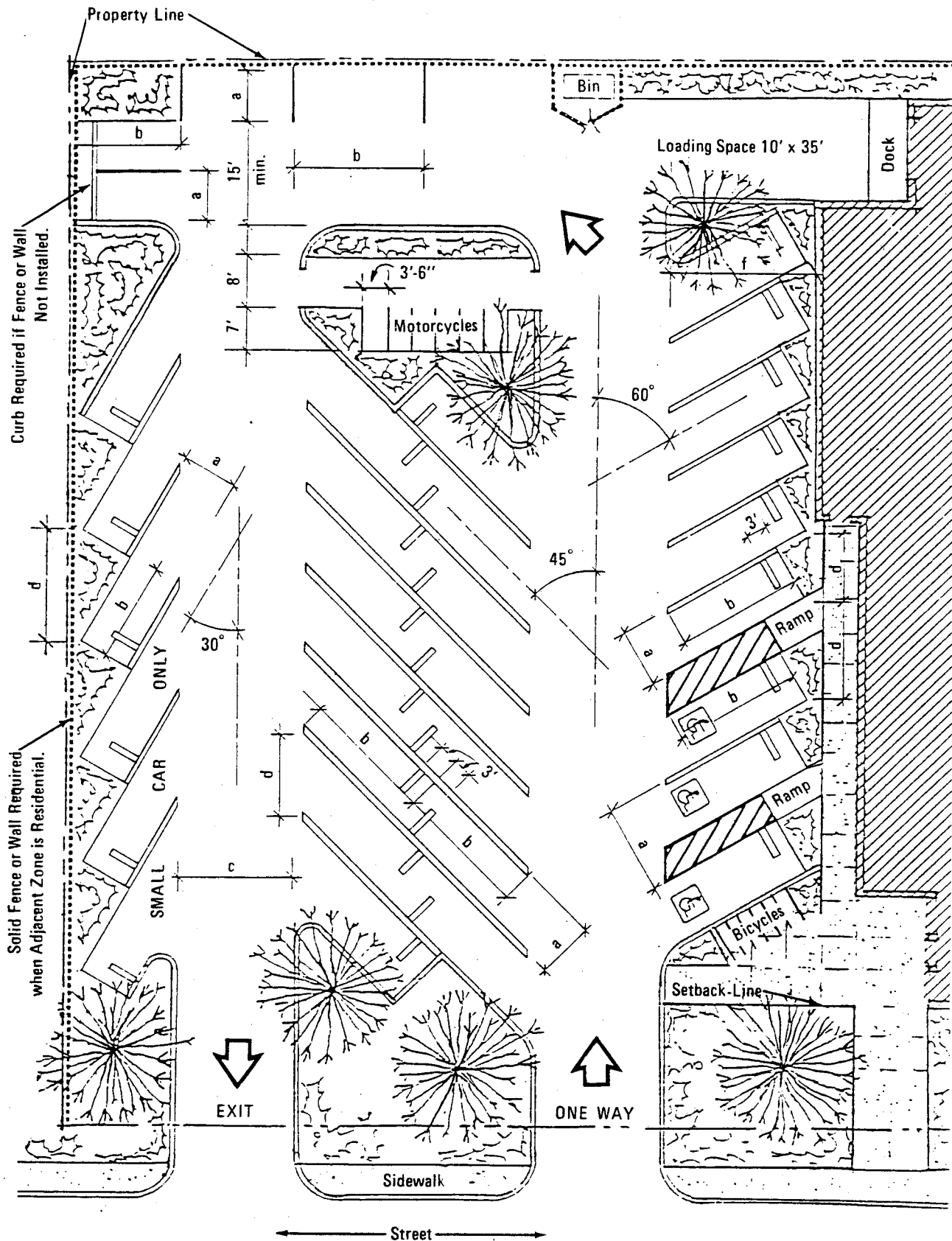
- a. Ramps to accessible walks and paths shall not encroach into parking areas except ramps at the interior end of a parking space may encroach into the loading area provided it does not impede the handicapped person to enter and leave their vehicle.
- b. Curbs and or wheel stops shall be installed to prevent vehicles from projecting over the required 4 feet wide access walks.
- c. Garages or parking areas shall maintain a minimum vertical clearance of 8 feet 2 inches for access to all handicapped parking spaces.³

¹ Not applicable to existing facilities unless change of occupancy.

² Less than 5 spaces, one handicapped size space required but not exclusively reserved or marked.

³ May be waived when compliance to regulate or "equivalent facilitation" creates an unreasonable hardship.

8 J. TYPICAL PARKING LOT LAYOUT.



K. TYPICAL DRIVEWAY – PARKING PLOT PLAN & DETAILS

1. The width of a parking space shall be increased by 2'-0" when adjacent to fences, walls and planters.
2. A 5'-0" backing area required when there are more than 4 spaces. (Based on 9'-0" wide space.)
3. A 6'-0" high solid fence or wall is required when parking area abuts a residential use or zone, except the height shall be limited to 42" when located in the front yard.
4. For minimum width driveways serving 5 or more spaces, the edge of driveway shall be at least 2'-0" from eave.
5. Bicycle storage facilities shall be protected by a barrier to minimize vehicles from striking parked bicycles.

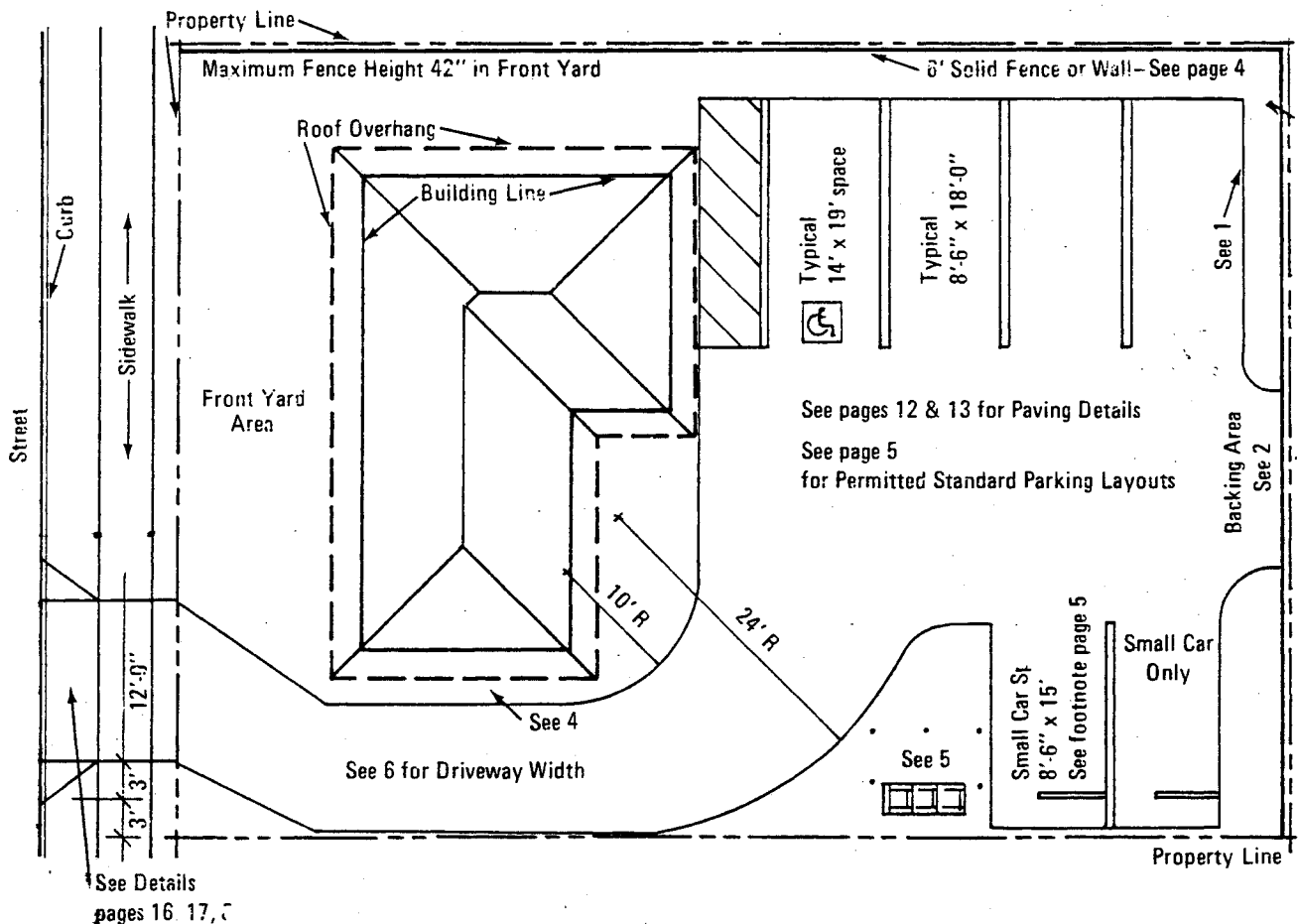
6.

| MINIMUM WIDTH OF DRIVEWAY | | |
|---------------------------|------------|---------------------------------|
| # of Spaces | Min. Width | Max. Length for Under 18' Wide* |
| 1-4 | 10' | None |
| 5-8 | 10' | 80' |
| 9-19 | 16'** | 80' |
| 20-up | 18' | None*** |

* Provide at least a 10' x 30' turn-out if longer driveway is required.

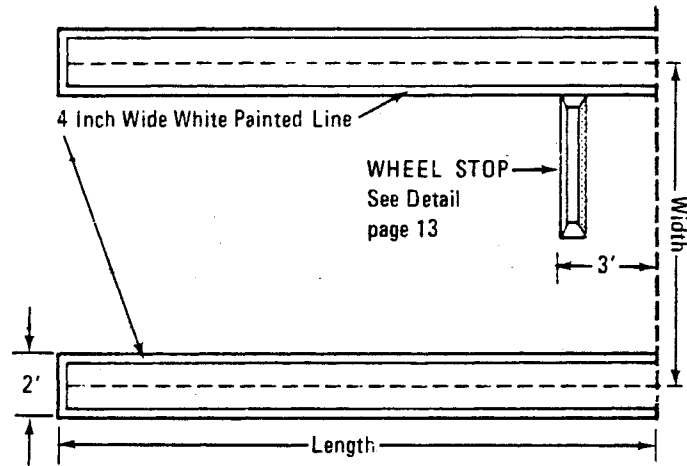
** Or provide separate 10' entrance and exit driveways (any length), provided no portion of a building may be more than 150' from a 16' wide access.

*** If driveway also serves another building, a 10'-0" unobstructed minimum width is required.

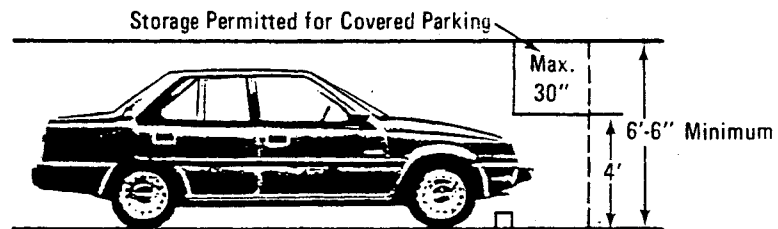


7. Typical Offstreet Parking space.

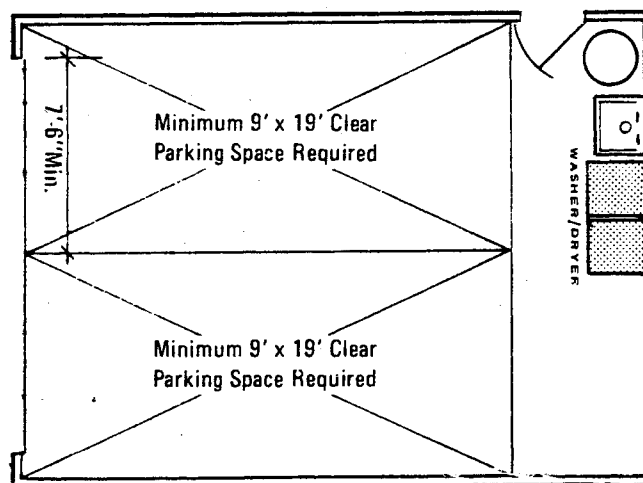
PLAN VIEW



SIDE VIEW



PRIVATE GARAGE



1. ACCESS. Parking area layouts shall be arranged so that vehicles do not exit by backing into a public street (not applicable to single family dwellings or duplexes).
2. GRADING AND DRAINAGE. No parking area will be approved that has a minimum grade less than 0.5% or a maximum grading of more than 15%. No driveway to a parking area or space shall be approved with a surface grade exceeding 15%.
3. SURFACING. All parking spaces and driveways shall be surfaced in accordance with the paving schedule on page 12 herein.
4. DIRECTIONAL INDICATORS. Each parking area with more than one row of parking spaces shall have directional signs or painted directional markers to guide traffic.
5. LIGHTING STANDARDS AND FIXTURES. Adequate lighting shall be provided in all parking areas used by the public for safe pedestrian and vehicular movement. A minimum lighting level of 0.2 foot-candles is required for all parking areas. All lights provided to illuminate any loading space or parking area shall be so designed and adjusted so as to reflect light away from any public road or street, and away from any adjoining land on which a dwelling is located or which is zoned for other than business or industrial uses.
6. WHEEL STOPS. All parking spaces shall be improved with a wheel stop a minimum of 6 inches high where the space is abutting: adjacent property, a building, a landscape area, or a walkway. See pages 7, 8, 9, 10, 12, and 13 for details.
7. STRIPING. All parking spaces shall be delineated by double-line striping consisting of 4-inch wide painted white lines 2 feet apart. See page 10 for detail.
8. IDENTIFICATION OF SPACES. All Handicapped, Small Car Only and Loading spaces are required to be identified by symbols or lettering.
9. WALLS AND FENCES. All parking areas abutting property in any Residential Zone shall be separated from such abutting property by a properly maintained solid fence or wall 6'-0" in height; except such fence or wall shall be 42 inches in height where said fence or wall abuts a front yard on adjacent property or that portion of any side or rear yard on adjacent property wherein the height of a fence or wall is limited to 42 inches. (Section 6706)
10. LANDSCAPING. Except in zones subject to the C-37, C-38, C-40, M-54, M-58, S-80, S-82, S-87, S-88k S-90, S-92, and S-94 Use Regulations, an area at least equal to 5 percent of the area of any parking area shall be landscaped in conformance with the requirements of Sections 6792b and 6712 of the San Diego County Zoning Ordinance. See pages 21 through 25.
11. LOADING SPACE shall mean an area, other than a street or alley on the same lot with a building or a group of buildings not less than 10 feet wide, 35 feet long, and 14 feet high which affords adequate ingress and egress for trucks from a public street or alley, and which is permanently reserved and maintained for the temporary parking of commercial vehicles while loading or unloading merchandise or materials.⁴
12. PARKING SPACE shall mean an unobstructed space or area other than a street or alley, not less than the minimum size specified for the type as noted on page 5 provided with adequate ingress and egress, and which is permanently reserved and maintained for the parking of motor vehicles.
13. MARGIN NOTES ON PARKING/LANDSCAPE PLANS. Applicant shall note on the plans:
 - a. The number of parking spaces required for each land use.
 - b. The total number of parking spaces provided.
 - c. The number of small car spaces provided.
 - d. The number of regular car spaces provided.
 - e. The number of handicapped spaces provided.
 - f. The number of loading spaces provided.
 - g. The percent of area devoted to landscaping.

⁴Loading and unloading shall not obstruct access to any parking space.

12 M. PAVING THICKNESS SCHEDULE AND DETAILS.

Except for zones subject to the Agricultural Use Regulations, and the S-87 Use Regulations, all parking spaces, loading spaces and driveways serving them shall be hard surfaced with a minimum of 1.5" of hot or cold mixed bituminous surfacing or 3.5" of portland cement concrete; provided, however, that parking spaces and driveways accessory to one-family and two-family dwellings need not be surfaced with a more durable type of surfacing than that which exists on the street which provides access to the lot or building site upon which such dwelling is located. Required surfacing shall be placed on a suitably prepared base. Within the desert areas of the North Mountain, Mountain Empire and Desert Subregional Plan areas, 4 inches of decomposed granite or suitable alternate material may be approved by the Director of Planning in lieu of more durable paving on residential driveways.

| REQUIRED THICKNESS OF A/C AND SUBBASE* | | | |
|--|---|---|---|
| Existing Soil Classifications | Residential General Parking for Autos Serving Not More Than 4 Spaces | Multi-Family Commercial Store Frontage Parking | Commercial Heavy Duty Truck Loading and Parking |
| GOOD TO EXCELLENT BASE Decomposed granite, well graded sands and gravels which retain load supporting capacity when wet. | 2" A/C on existing soil | 3" A/C on existing soil | 3" A/C on 5" aggregate base or 4" A/C on aggregate base or 5" A/C on existing soil |
| MEDIUM BASE Silty sands and sand gravels containing moderate amounts of clay and fine silt. Retains moderate amount of firmness under adverse moisture conditions. | 2" A/C on 6" of decomposed granite base or 3" A/C on 3" aggregate base or 4" on existing soil | 3" A/C on 5" aggregate base or 4" A/C on 3" aggregate base or 5" on existing soil | 3" A/C on 7" aggregate base or 4" A/C on 5.5" aggregate base or 6" A/C on existing soil |
| POOR BASE Soils having appreciable amounts of clay and fine silt. Soils become quite soft and plastic when wet. | 3" A/C on 5.5" aggregate base or 5" A/C on existing soil | 3" A/C on 8" aggregate base or 4" A/C on 5.5" aggregate base or 6" A/C on existing soil | 3" A/C on 12" aggregate base or 4" A/C on 10.5" aggregate base or 8" A/C on existing soil |

*This paving thickness design for A/C paving shall be used unless a pavement design by a registered civil engineer is submitted and approved by the Department of Planning and Land Use.

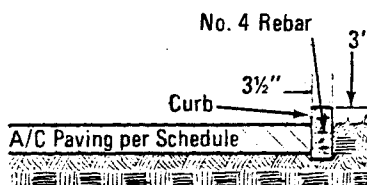
1. **TREATMENT FOR EDGE OF A/C PAVING.** Protection of all A/C paving edges is required by 2" x 2" redwood strips staked 4' O/C and at corners of appropriate concrete curb or A/C berm.

REDWOOD STRIP

2" x 2" (nominal) redwood border strip on all A/C pavement edges (not required for portland cement concrete)



CONCRETE CURB

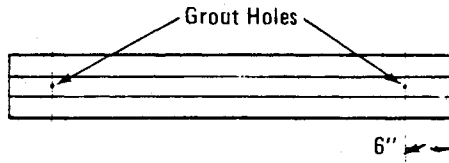


ASPHALT BERMS

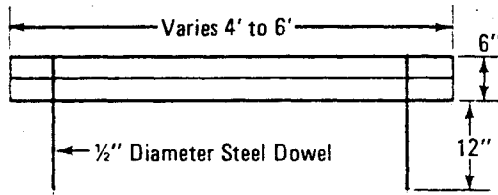


2. WHEEL STOP DETAILS.

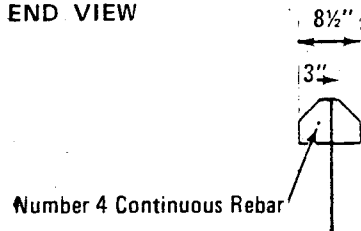
TOP VIEW



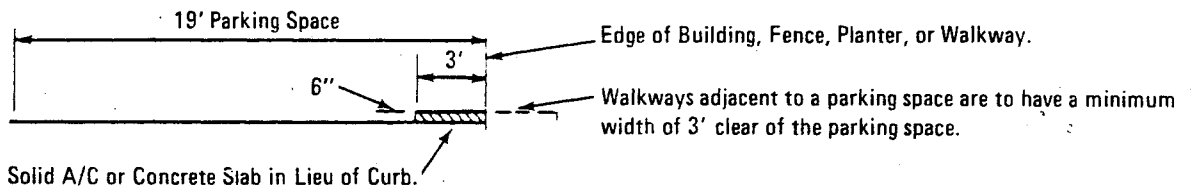
FRONT VIEW



END VIEW



OPTIONAL WHEEL STOP



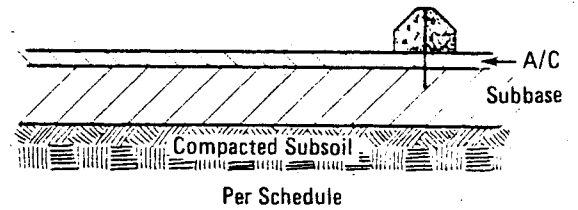
PAVING

All parking spaces or areas and loading spaces and drive-ways serving them shall be hard-surfaced with asphalt concrete (AC) per the A/C paving schedule or 3-1/2" of portland cement concrete.

Concrete



Asphaltic Concrete



14 *Blank*

A. DESIGN STANDARDS FOR RESIDENTIAL DRIVEWAYS

1. GENERAL.

- a. All construction to connect driveways to County roads, whether or not the road is in the Maintained System shall be first authorized by a valid permit, as prescribed in Title 7, Division 1, Chapter 4 or Title 5, Division 1 of the San Diego County Code of Regulatory Ordinances, or subdivision improvement agreement. Permits for residential driveways are obtained from the Department of Planning and Land Use. (Permits for commercial driveways are obtained from the Department of Public Works.)
- b. A residential driveway is any driveway serving property used solely as a private residence or a double triple-family dwelling unit, including farms or ranches not used as retail outlets. All other driveways shall be termed commercial driveways.
- c. The construction, repair and maintenance of all driveways, curbs and gutters, and sidewalks shall be the responsibility of the property owner, developer, or tenant of the abutting property. The responsibility shall include the entire area of driveway from the edge of the existing pavement of traveled way to the property line and shall include all culverts or other structures necessary for property drainage control.
- d. When an opening for a driveway is constructed through an existing portland cement concrete curb, the existing curb, or curb and gutter, shall be saw-cut at the limits of work or removed to the nearest construction joints and the opening replaced with standard curb and driveway.
- e. When a driveway through a portland cement curb is abandoned or is replaced by another driveway serving the same property, the owner shall saw-cut and remove the old driveway and install a full height curb across the superfluous opening. The depression behind the curb shall be properly filled.
- f. All portland cement concrete for curbs, sidewalks and driveways shall be 5 and ½ sacks cement per cubic yard.
- g. No concrete shall be poured until forms have been inspected by the County Building Inspector, and written approval is given.

2. DRIVEWAY LOCATION AND WIDTH.

- a. See pages 18 and 19 for driveway and width requirements.
- b. No portion of any driveway shall be allowed within 3 feet of the property line extended normal to the edge of right-of-way except on joint-use driveways and on lots having 21-foot frontage. Joint-use driveways may be permitted in special instances where written approval of both property owners is filed with the Department of Public Works. An approved joint-use driveway must conform to all driveway standards for a single driveway other than the property line location.

3. DRIVEWAY GRADING. Driveway grading shall conform to the roadway cross-slope within the traveled way and parking lanes of the ultimate section of the roadway. Outside this area, within the right-of-way, driveway grades shall conform to sidewalk grades, if sidewalks are provided. In no event, shall driveway grades exceed 10 percent within right-of-way. See page 16 for typical driveway profiles.

4. DRIVEWAY SURFACING.

- a. See page 17 for construction details.
- b. All portland cement concrete driveways shall be 3 and ½ inches thick. If the subgrade material has more than 3 percent expansion index, the subgrade material shall be replaced with 6 inches of decomposed granite base.
- c. Where portland cement concrete curbs are not installed, driveway approaches shall be constructed of asphaltic concrete, road oil mix, or decomposed granite and shall extend from the edge of the traveled way to the property line. Asphaltic concrete driveways constructed on subgrade material with more than 3 percent expansion index shall

have an A/C thickness of at least 2 inches over 6 inches of decomposed granite base unless a pavement design by a registered civil engineer is submitted and approved by the Department of Planning and Land Use.

- d. Portland cement concrete curb openings will be permitted only in those located where complete standard portland cement concrete driveways are to be constructed concurrently.

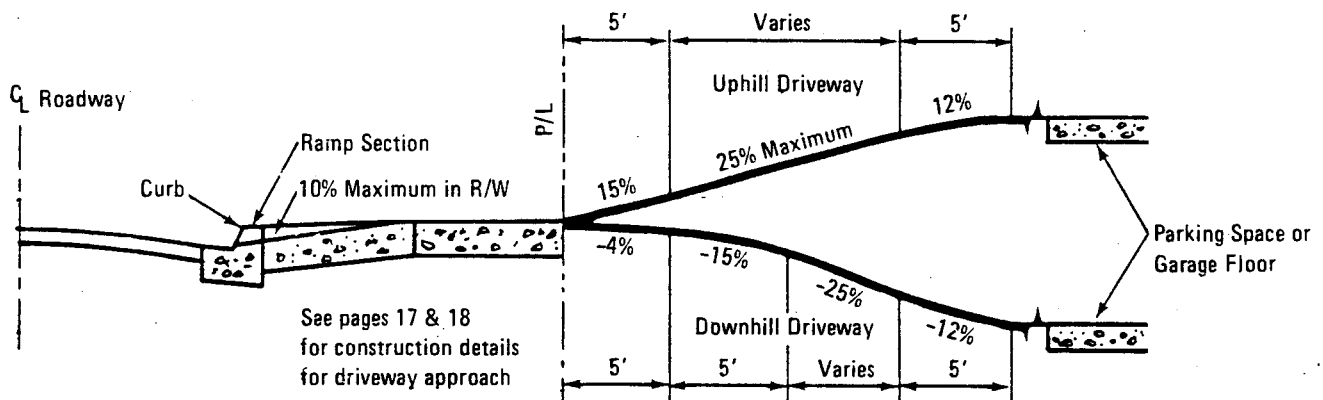
5. DRIVEWAY CULVERTS.

- a. Where driveways cross existing roadside ditches, a dip section providing an unobstructed waterway equivalent to the full area of the ditch may be used if grades are feasible. Where grades make use of a dip section infeasible, a culvert pipe of a diameter 6 inches less than the depth of the ditch, but not less than 18 inches shall be installed. When a culvert is to be used and the cross-sectional area of the ditch, excluding 6 inches of freeboard, exceeds 4 square feet, the design of the driveway culvert shall be reviewed for adequacy by the Department of Public Works.
- b. The construction of any headwalls, inlet structures, or any other structure shall be in accordance with Standard Plans and Specifications of the Department of Public Works.

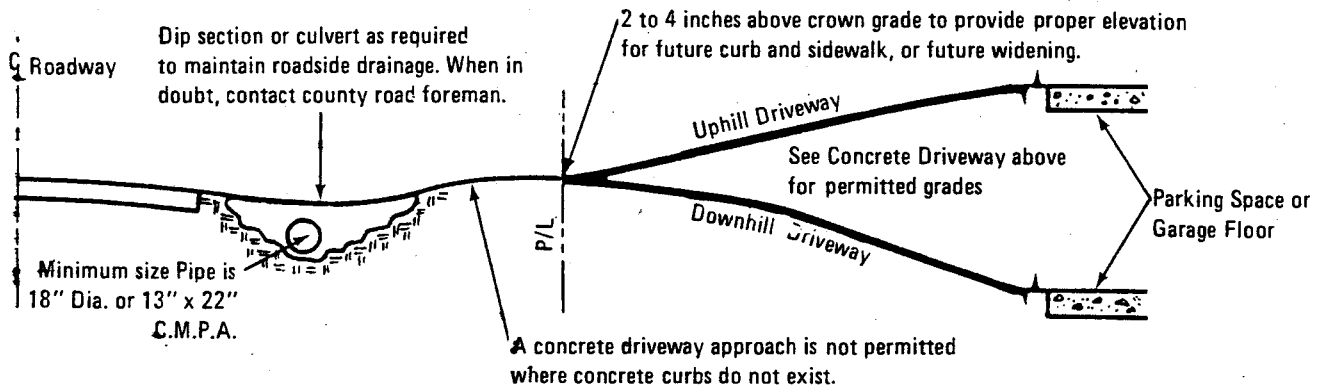
B. TYPICAL DRIVEWAY PROFILES

1. Driveways with grades greater than 15% shall be surfaced with asphalt concrete or portland cement concrete.
2. Portland cement concrete driveways with grades greater than 14% shall have a deep broom finish perpendicular to the direction of travel.
3. Maximum grade break is 14%.
4. Driveways serving parking lots (5 or more spaces) shall not exceed 15% slope.

EXISTING CONCRETE CURB (Concrete Driveway)



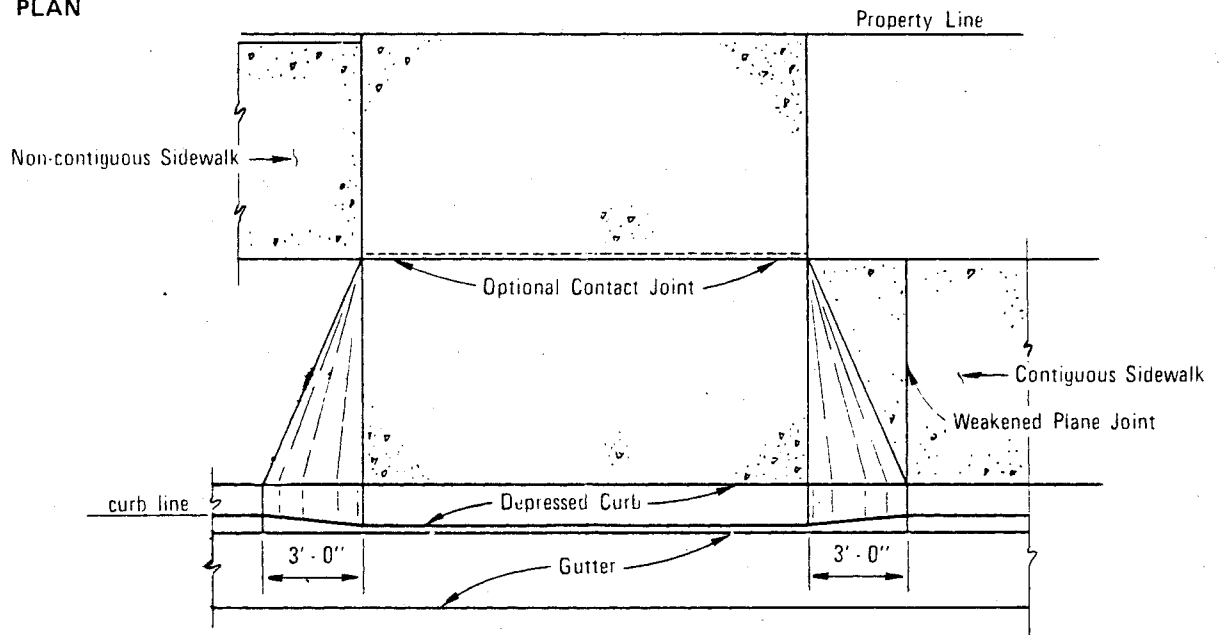
NO CURB (Asphaltic Concrete, D.G., or Dirt Driveway)



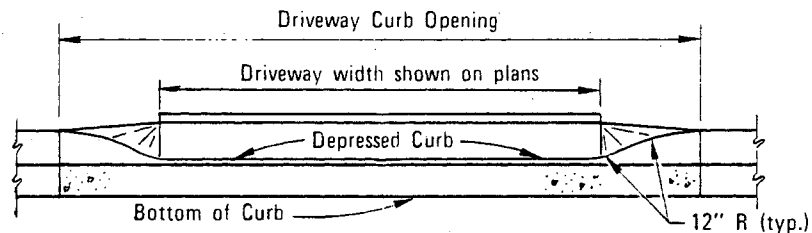
C. CONCRETE DRIVEWAYS – CONSTRUCTION DETAILS

1. Driveway permits for one-, two- and three-family dwelling units are issued by the Department of Planning and Land Use; all others are issued by the Department of Public Works.
2. No concrete shall be placed until forms and subgrades are inspected by the Department of Planning and Land Use.
3. Concrete shall be 517-C-2500.
4. See pages 18 and 19 for width and location requirements.

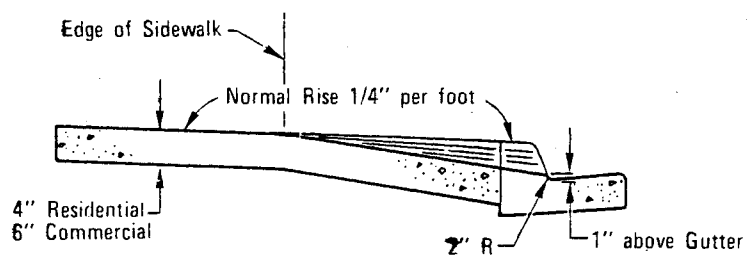
PLAN



ELEVATION



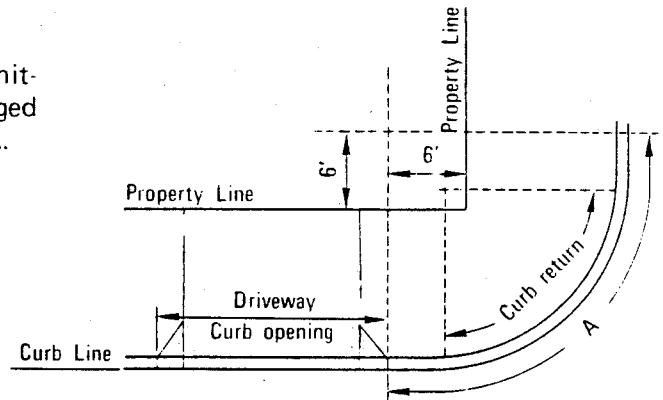
SECTION



18 D. DRIVEWAY LOCATION – CORNER LOT.

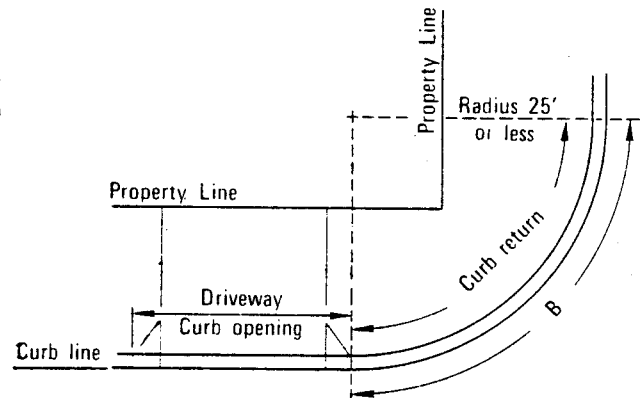
REQUIREMENT 1

No portion of any curb opening shall be permitted within 6' of the intersection of the prolonged property lines and the curb as shown by arc A.



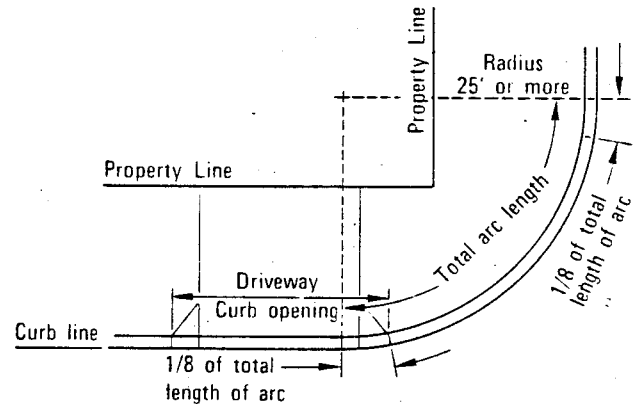
REQUIREMENT 2

No portion of any curb opening shall be permitted in the curb return where the radius of curb is 25' or less, as shown by arc B.



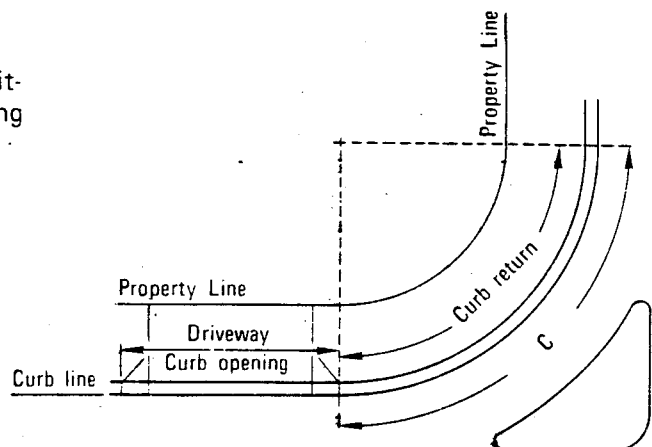
REQUIREMENT 3

On all curb returns where the radius is 25' or more, curb openings may encroach upon each end of the return distance equal to 12.5% or 1/8 of the total length of the arc on the curb return, thus leaving at least 75% of the length of arc on the return face free from driveway encroachment, provided Requirement 1 is met.



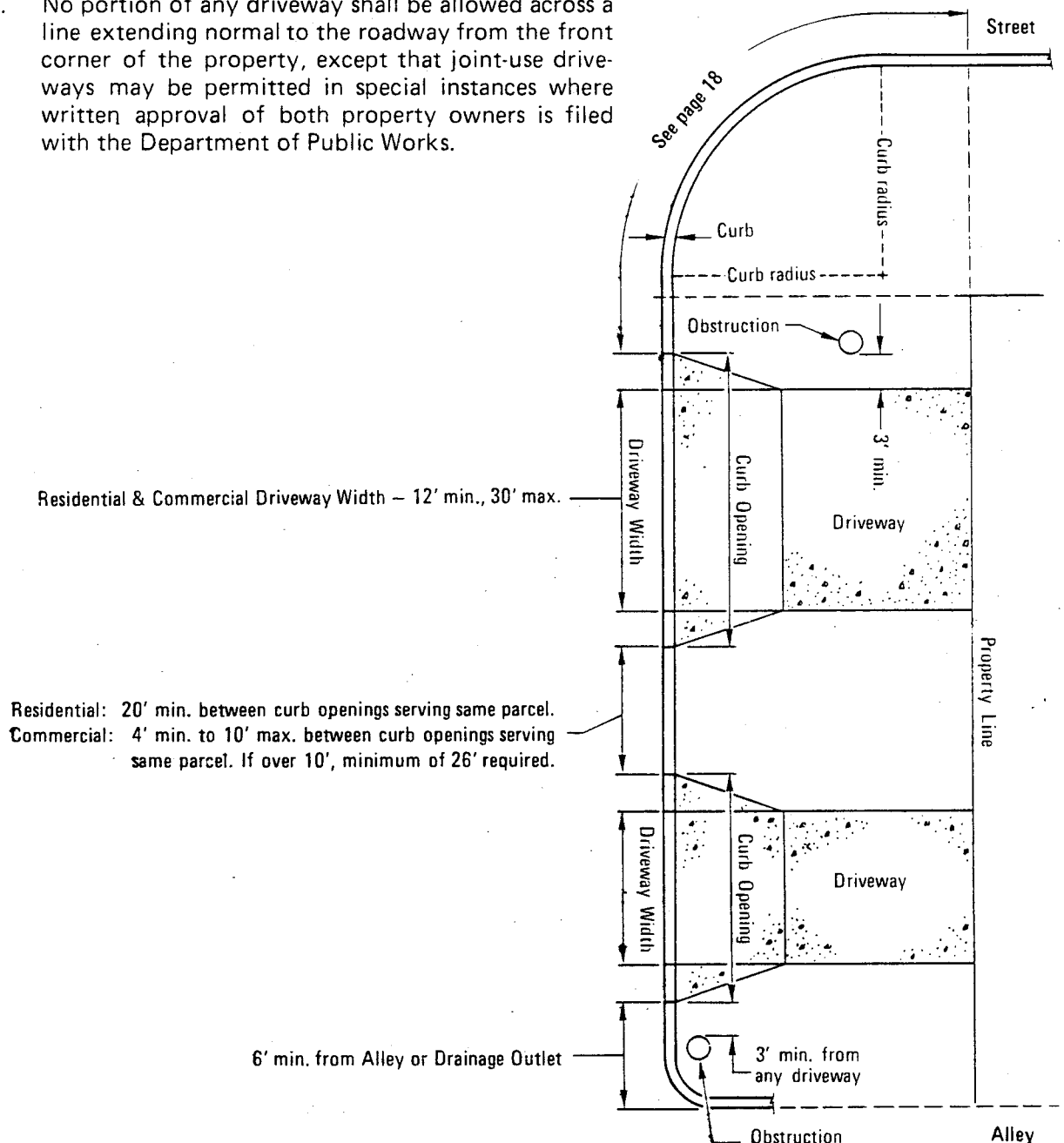
REQUIREMENT 4

No portion of any curb opening shall be permitted in the curb return where a separate turning movement is provided, as shown by arc C.



E. DRIVEWAY LOCATION AND WIDTH REQUIREMENTS.

1. Curb openings, except for joint-use driveways and driveways on lots having 21-foot frontage or less, shall be located at least 3 feet from the side property line extended.
2. Not more than 40% of the property frontage on residential lots, nor 60% of the property frontage on commercial lots may be allocated for driveway curb openings, except that lots having frontage of 25 feet or less are entitled to one 12-foot driveway (18-foot curb opening).
3. All driveways and curb openings shall be a minimum of 3 feet from any obstruction, i.e., poles, hydrants, etc.
4. No portion of any driveway shall be allowed across a line extending normal to the roadway from the front corner of the property, except that joint-use driveways may be permitted in special instances where written approval of both property owners is filed with the Department of Public Works.



A. GENERAL REQUIREMENTS.

1. Section 6793(b) of the Zoning Ordinance requires, except in certain Commercial, Manufacturing and Special Purpose zones, that a minimum of 5% of all parking areas shall be landscaped in conformance with this Design Manual and with Section 6712, of the County Zoning Ordinance.
2. In parking areas with more than four (4) parking spaces, a minimum of 14 square feet of landscape for each space shall be provided. This landscaping shall be used in parking lot planters and/or for perimeter screening. It shall be provided in addition to any other landscape that is required in the right-of-way or setback areas by the M-50 and M-52 Use Regulations or by any other County Ordinances or discretionary application approvals.
3. Prior to the issuance of a final building occupancy certificate, all landscape planting and irrigation shall be installed and be in acceptable condition. The plants shall be healthy and free of weeds, disease, or pests. The irrigation system shall be properly constructed and in good working order.
4. Information regarding landscape requirements, plans, and design concepts is given on the following pages. The plans are typically prepared by nurserymen, landscape contractors, and landscape architects. If you have questions, please contact the Department of Planning and Land Use landscape architect.

B. MATERIALS FOR LANDSCAPING.

1. Plant materials shall be native or drought-tolerant species. Many acceptable species for County-wide planting are listed in the Planting Manual booklet, which is available at the cashier's office of the County Department of Public Works or the Department of Planning and Land Use.
2. When allowed by an Administrative Permit issued by the Director of Planning, the landscaping may include natural features such as rock and stone, nondrought-tolerant plant materials, and structural features such as fountains, reflecting pools, art work, screens, walls and fences.

22 c. PLANTING REQUIREMENTS.

1. Landscape plans shall be identical to the approved plot plans. A north arrow and scale shall be shown.
2. Clearly label all plant materials, indicate the name, size and number of each plant used. Remarks may be included to provide useful information such as flower color, spacing of plants, and staking instructions.
3. Plans shall provide information on soil amendments to be used, including items such as fertilizer name, quantity, and method of application. Depending on the local soil conditions, an acceptable soil amendment program may be as follows:
 - a. 2 to cubic yards compost or nitrified wood shavings per 1000 sq. ft.
 - b. 10 to 20 pounds commercial fertilizer, i.e., 16-6-8 per 1000 sq. ft.
 - c. 2 pounds agricultural gypsum per 1000 sq. ft. to aid loosening of soil.
 - d. 1 pound soil sulfur (lime) per 1000 sq. ft. to neutralize the soil.
 - e. Rototill the amendments 6 inches into the soil.

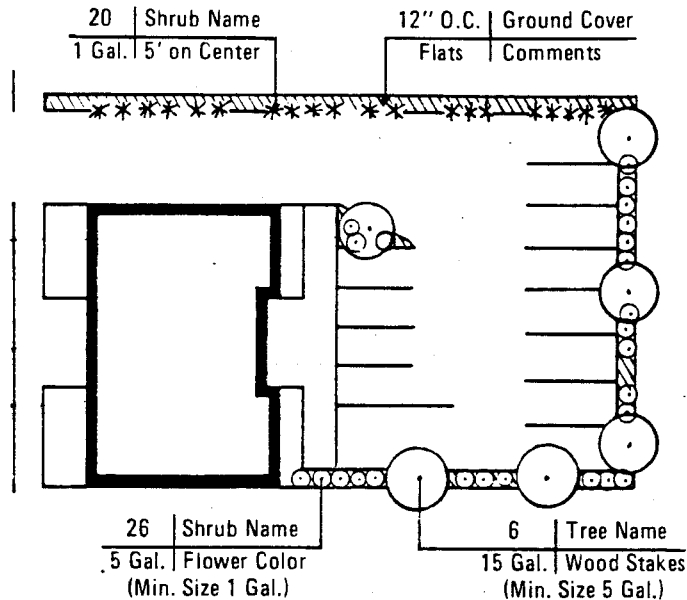
Native plants which do not require amendments shall be planted in existing topsoil which is free of construction debris.

4. Provide access to adjacent properties (stepstones, walks) or partitions and screening as necessary.

D. IRRIGATION REQUIREMENTS.

1. Plans shall show location of irrigation equipment, including the water meter (or any other point of connection), valves, backflow prevention devices, pipes, sprinklers and drip emitters. Pipe sizes shall be shown.
2. The legend shall provide complete description of irrigation equipment.
3. All backflow prevention devices shall be adequately reinforced. (See Irrigation F2 on page 23.)
4. Sprinkler heads and nonpressure PVC lines may be substituted with drip emitters and polyethylene tubing for DRIP IRRIGATION. A water filter and pressure regulator is also required. Drip emitters are suitable for watering individual trees and shrubs rather than lawns or beds of ivy and ice plants.
5. Sprinklers shall be field adjusted to eliminate overspray onto walkways, drives or roads.
6. Sprinklers on risers next to curbs or walks shall have staked, swivel-joint or flexible risers. Pop-up sprinklers are preferable.
7. Only pop-up sprinklers are acceptable in lawn areas.

E. TYPICAL PERIMETER PLANTING PLAN.



PLANTING NOTES:

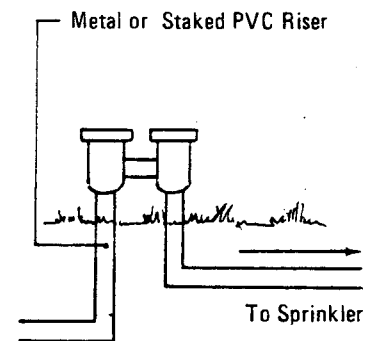
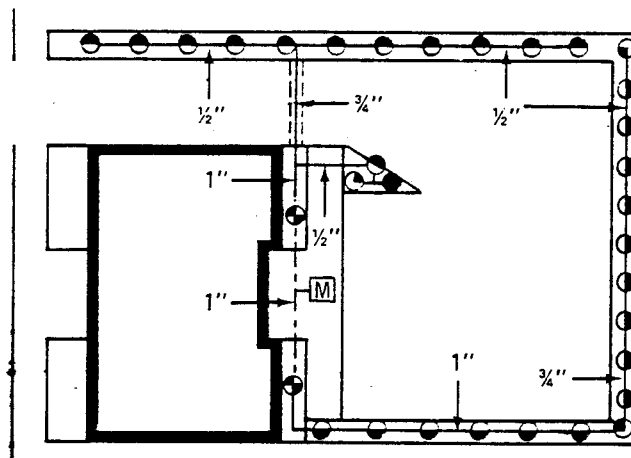
Till soil amendments and fertilizer 6 inches into soil. Recommend fertilizer tablets for trees and shrubs.

FINISH GRADING:

All landscaped areas shall be finish graded to remove rocks and clods and to ensure adequate surface drainage.

F. TYPICAL IRRIGATION PLAN FOR PERIMETER PLANTING.

1. Stake all shrubheads adjacent to curbs and paving.
2. Antisiphon valves shall be reinforced as per County standards with metal or staked PVC risers (use two #4 rebars, 12 G.A. galvanized wire, and weatherproof taping with PVC riser).
3. All sprinklers shall be field adjusted to eliminate overspray onto walkways, drives, or roads.



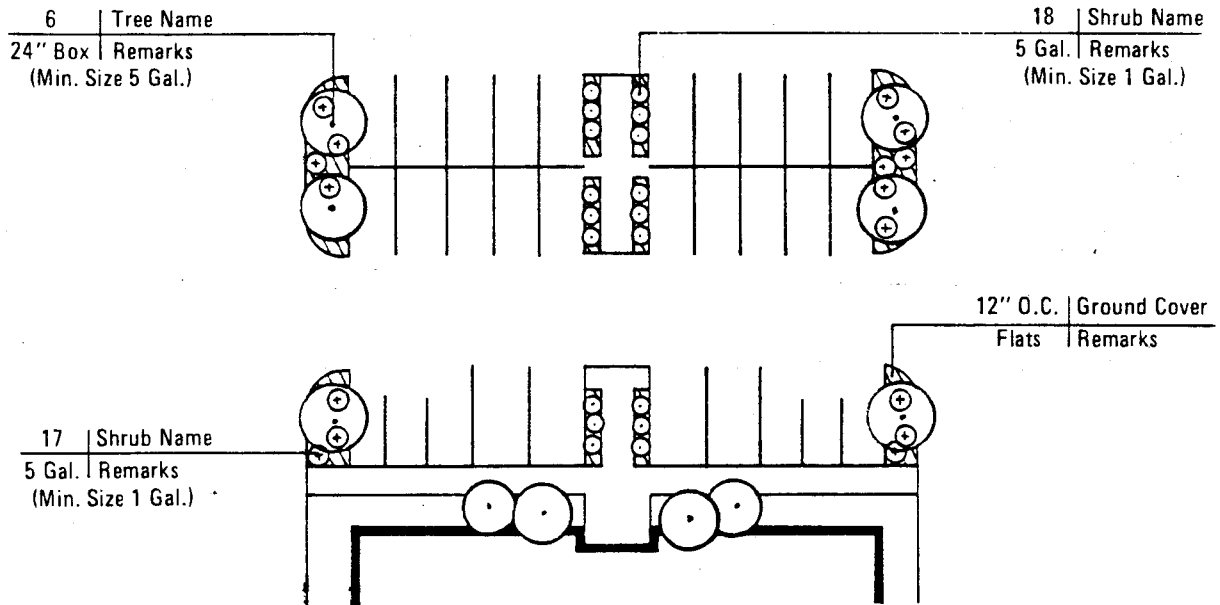
Antisiphon Valve: See 2.

LEGEND

- Brandname 3/4" Brass Antisiphon Valve. See Reinforcement (Item 2).
- Brandname Half-circle Shrubhead 1.0 Gallon per Minute. 10' Radius.
- ◐ Brandname Quarter-circle Shrubhead 0.5 Gallon per Minute. 10' Radius.
- Brandname Bubbler Head Adjustable to 2.0 Gallons per Minute.
- Pressure Line PVC Schedule 40. Bury Minimum 18" Depth.
- Nonpressure Line PVC Class 200. Bury Minimum 12" Depth.
- PVC Schedule 40 Sleeve on Nonpressure Line Under Paving. 18" Depth.
- [M] 1" Water Meter. 60 P.S.I. Available Pressure.

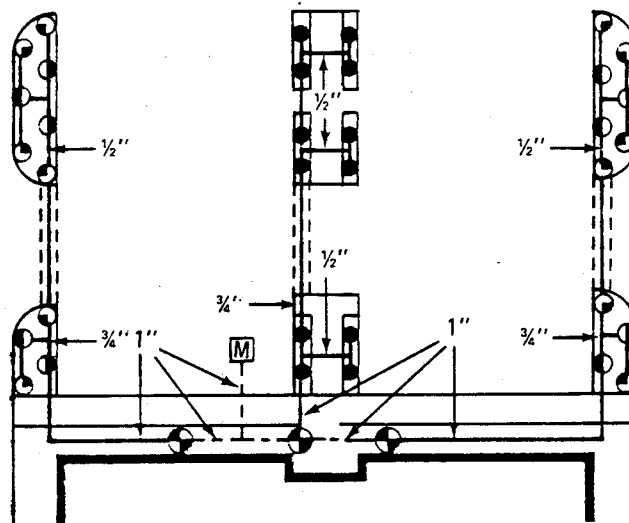
24 G. TYPICAL PARKING LOT PLANTERS.

PLANTING PLAN REQUIREMENTS: See page 22 and 23.



H. TYPICAL PARKING LOT IRRIGATION PLAN.

IRRIGATION PLAN REQUIREMENTS: See page 22 and 23.



I. LANDSCAPE DESIGN NOTES.

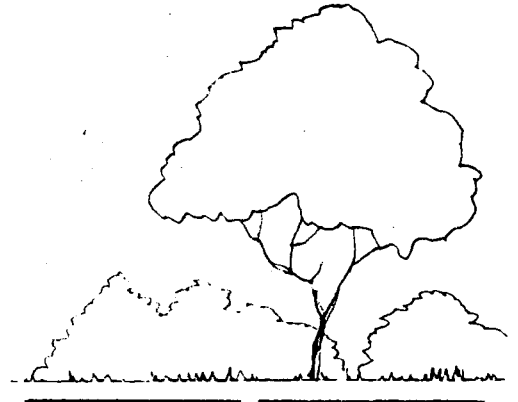
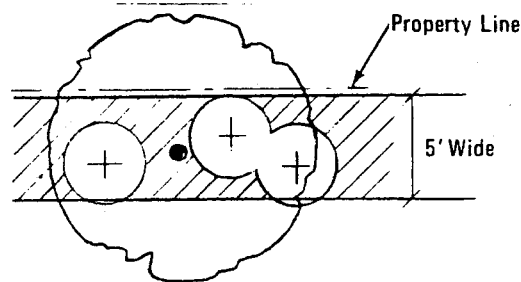
1. **LANDSCAPE DESIGN.** The purpose of parking lot landscape is to enhance the aesthetic appearance of the parking area. The landscaping shall reflect the existing street planting and complement the site's architectural theme.
2. **PERIMETER PLANTERS.** Whenever possible, planters shall be placed along the edge of the parking lot and driveway. Perimeter planting brings relief from continuous areas of paving and also screens parked cars from view of the surrounding properties.

Trees: Minimum of one 5 gal. tree per 5 spaces

Shrubs: Minimum 1 gal. size

Ground Cover: Flats or 6 to 8 inch cuttings

Planter strips with shrubs shall have an unpaved minimum width of 2 feet. Planter strips with trees shall have an unpaved minimum width of 5 feet.



High shrubs and/or trees may be used for perimeter screening except at driveway entrances or wherever plant material will obstruct the view of oncoming traffic.

3. **PARKING LOT PERIMETERS.** In larger parking lots, the planters shall be used to bring relief from excess stretches of paving and to aid the flow of both automotive and pedestrian traffic.

High canopy trees, low shrubs and ground cover shall be used for optimum traffic visibility.

